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[54] ADAPTIVE, PERFORMANCE-OPTIMIZING COMMUNICATION SYSTEM FOR COMMUNICATING WITH AN IMPLANTED MEDICAL DEVICE

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[58] Field of Search 607/32, 60, 30, 607/31

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[57] ABSTRACT

An adaptive, performance-optimizing communication system for communicating with an implanted medical device in which signals are transmitted and received in accordance with predetermined, interrelated operational parameters, such as transmission rate, transmitter power, and the like. Various aspects of system performance, including bit error rate in received signals, the strength of received signals, the signal-to-noise ratio of received signals, the presence of local RF noise and non-telemetry related RF signals, and the like, are dynamically monitored by the communication system, to determine whether predetermined system performance goals are being met. If it is determined that one or more system performance goals are not being met, one or more operational parameters may be automatically adjusted so that desired performance can be achieved.

12 Claims, 6 Drawing Sheets

